

Please replace the Abstract as rewritten below:

~~(57)~~ Abstract

The invention relates to a method for transmitting information in a communication system ~~(1)~~, which ~~comprises~~ includes at least a mobile communication network ~~(6)~~, in which information is transmitted from one or more transmitting devices ~~(7a, 7b, 2)~~ to one or more receiving devices ~~(2, 7a, 7b)~~. In the data transmission, at least one training sequence (s_i) is used, and in the receiving device ~~(2, 7a, 7b)~~, signals transmitted by at least two antennas ~~(11a, 11b)~~ are received. In the method, different phases of the same training sequence (s_i) are used in the data frames transmitted through different antennas ~~(11a, 11b)~~.

~~Fig. 1~~